Installation Manual

Installation & Appliance Set-Up

INSTALLER: Leave this manual with party responsible for use and operation.
OWNER: Retain this manual for future reference.

NOTICE: DO NOT DISCARD THIS MANUAL

QUADRA-FIRE®

MT. VERNON PELLET STOVE

ADVANCED ENERGY (AE)

Model(s):

MTVERNON-AE-CSB

MTVERNON-AE-MBK

MTVERNON-AE-PBK

MTVERNON-AE-PDB

MTVERNON-AE-PFT

MTVERNON-AE-PMH

Pellet Fuels Institute

Tested and Listed by O-T-L Portland Oregon USA C US
OMNI-Test Laboratories, Inc.
061-S-68-6

CAUTION

Tested and approved for wood pellets, shelled field corn, wheat and black oil sunflower seeds. Burning of any other type of fuel voids your warranty.

CAUTION

Check building codes prior to installation.

- Installation MUST comply with local, regional, state and national codes and regulations.
- Consult local building, fire officials or authorities having jurisdiction about restrictions, installation inspection, and permits.

WARNING

If the information in these instructions is not followed exactly, a fire may result causing property damage, personal injury, or death.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- Do not overfire - If heater or chimney connector glows, you are overfiring. Overfiring will void your warranty.
- Comply with all minimum clearances to combustibles as specified. Failure to comply may cause house fire.

WARNING

HOT SURFACES!
Glass and other surfaces are hot during operation AND cool down.

Hot glass will cause burns.

- Do not touch glass until it is cooled
- NEVER allow children to touch glass
- Keep children away
- CAREFULLY SUPERVISE children in same room as fireplace.
- Alert children and adults to hazards of high temperatures
- **High temperatures may ignite clothing or other flammable materials.**
- Keep clothing, furniture, draperies and other flammable materials away.

NOTE

To obtain a French translation of this manual, please contact your dealer or visit www.quadrafire.com

Pour obtenir une traduction française de ce manuel, s'il vous plaît contacter votre revendeur ou visitez www.quadrafire.com

Safety Alert Key:

- ***DANGER!*** Indicates a hazardous situation which, if not avoided will result in death or serious injury.
- ***WARNING!*** Indicates a hazardous situation which, if not avoided may result in death or serious injury.
- ***CAUTION!*** Indicates a hazardous situation which, if not avoided, may result in minor or moderate injury.
- ***NOTICE:*** Indicates practices which may cause damage to the appliance or to property.

TABLE OF CONTENTS

1 Important Safety Information.....3
- A. Appliance Certification 3
- B. BTU & Efficiency Specifications.....3
- C. Glass Specifications 3
- D. Electrical Rating.....3
- E. Mobile Home Approved 3

2 Getting Started.....4
- A. Design, Installation & Location Considerations 4
- B. Thermostat Wall Control Location.....5
- C. Tools And Supplies Needed.....5
- D. Inspect Appliance and Components 5
- E. Install Checklist.....6

3 Dimensions and Clearances.....7
- A. Appliance Dimensions 7
- B. Clearances to Combustibles (UL and ULC).....8
- C. Hearth Pad Requirements (UL and ULC).....8

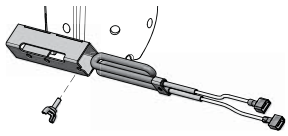
4 Vent Information.....9
- A. Venting Termination Minimum Requirements 9
- B. Avoiding Smoke and Odors 10
- C. Negative Pressure.....11
- D. Draft 11
- E. Chimney and Exhaust Connection 11
- F. Equivalent Feet of Pipe 12
- G. Pipe Selection Chart 12

5 Venting Systems 13
- A. Alcove 13
- B. Through The Wall 14
- C. Vertical into Existing Class A Chimney 15
- D. Through The Wall & Vertical - Exterior 15
- E. Vertical - Interior - Typical Installation.....15
- F. Masonry.....16
- G. Alternate Masonry 16

6 Appliance Set-Up 17
- A. Leg Leveling System 17
- B. Outside Air Kit Instructions 17
- C. Top Vent Adapter Installation 18
- D. Rear Vent & Rear Vent to Top Vent Adapter Installation....18
- E. Optional Log Set Placement Instructions 19
- F. Wall Control Thermostat Installation 20

7 Mobile Home Installation.....21

8 Accessory List 22



300 Watt Igniters come installed in brand new Mt. Vernon AE units and are for pellet fuel only. The 380 Watt Igniter is required for burning multi-grain fuels and is included in the component pack. Multi-fuels include, corn, sunflower seeds, and wheat.

1 Important Safety Information

A. Appliance Certification

Model	Mt. Vernon Pellet Stove
Laboratory	OMNI Test Laboratories, Inc.
Report No.	061-S-68-6
Type	Solid Fuel Room Heater/Pellet Fuel Burning Type
Standard	ASTM E1509-04, ULC S627-00 and ULC/ORD-C1482-M1990 Room Heater Pellet Fuel Burning type and (UM) 84-HUD, Mobile Home Approved.
FCC	Complies with Part 15 of FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTICE: This installation must conform with local codes. In the absence of local codes you must comply with the **ASTM E1509-04, ULC S627-00, (UM) 84-HUD and ULC/ORD-C-1482.**

B. BTU & Efficiency Specifications

EPA Certified:	4.16 grams per hour
Efficiency:	Up to 86.5%
BTU Input:	14,600 - 52,500 / hr
Heating Capacity:	Up to 3,000 square feet depending on climate zone
Vent Size:	3” or 4” Type “L” or “PL”
Fuels:	Pellets, Shelled Field Corn, Wheat and Black Sunflower Seeds
Shipping Weight:	449 lbs

*BTU will vary, depending on the type of fuel you use in your appliance. Consult your Quadra-Fire dealer for best results.

C. Glass Specifications

This stove is equipped with 5mm ceramic glass. Replace glass only with 5mm ceramic glass. Please contact your dealer for replacement glass.

D. Electrical Rating

115 VAC, 60 Hz, Start 5 Amps, Run 1.25 Amps

E. Mobile Home Approved

- This appliance is approved for mobile home installations when not installed in a sleeping room and when an outside combustion air inlet is provided.
- The structural integrity of the mobile home floor, ceiling, and walls must be maintained.
- The appliance must be properly grounded to the frame of the mobile home and use only Listed pellet vent Class “L” or “PL” connector pipe.
- Outside Air Kit, part OAK-ACC must be installed in a mobile home installation.

⚠ WARNING

Fire Risk.

Hearth & Home Technologies disclaims any responsibility for, and the warranty will be voided by, the following actions:

- Installation and use of any damaged appliance.
- Modification of the appliance.
- Installation other than as instructed by Hearth & Home Technologies.
- Installation and/or use of any component part not approved by Hearth & Home Technologies.
- Operating appliance without fully assembling all components.
- Operating appliance without legs attached (if supplied with unit).
- Do NOT Overfire - If appliance or chimney connector glows, you are overfiring.

Any such action that may cause a fire hazard.

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage.

For assistance or additional information, consult a qualified installer, service agency or your dealer.

NOTE: Hearth & Home Technologies, manufacturer of this appliance, reserves the right to alter its products, their specifications and/or price without notice.

Quadra-Fire is a registered trademark of Hearth & Home Technologies.

Install Guide

2 Getting Started

A. Design, Installation & Location Considerations

1. Appliance Location

NOTICE: Check building codes prior to installation.

- Installation MUST comply with local, regional, state and national codes and regulations.
- Consult insurance carrier, local building inspector, fire officials or authorities having jurisdiction over restrictions, installation inspection and permits.

It is a good idea to plan your installation on paper, using exact measurements for clearances and floor protection, before actually beginning the installation. Location of the appliance and chimney will affect performance.

Consideration must be given to:

- Safety, convenience, traffic flow
- Placement of the chimney and chimney connector and to minimize the use of chimney offsets.
- Place the appliance where there will be a clear passage for a Listed chimney through the ceiling and roof (vertical) or through exterior wall (horizontal).
- Installing the required outside air kit will affect the location of the vent termination.

When locating vent and venting termination, the ideal location is to vent above roof line when possible. This minimizes the affects of wind loading.

Since pellet exhaust can contain ash, soot or sparks, you must consider the location of:

- Windows
- Air Intakes
- Air Conditioner
- Overhang, soffits, porch roofs, adjacent walls
- Landscaping, vegetation
- Horizontal or vertical vent termination

2. Floor Support

The supporting floor under the appliance must be able to handle the weight of the appliance, fuel load and the weight of the chimney.

Ensure that your floor will support these weights prior to installation. Add sufficient additional support to meet this weight requirement prior to installation. The weight of the appliance is 429 lbs.

⚠ WARNING

Risk of Fire

Damaged parts could impair safe operation. Do NOT install damaged, incomplete or substitute components.

CAUTION

If burning shelled field corn, you must use approved venting specifically designed for corn to prevent corrosion or degradation. Follow the instructions from the venting manufacturer.

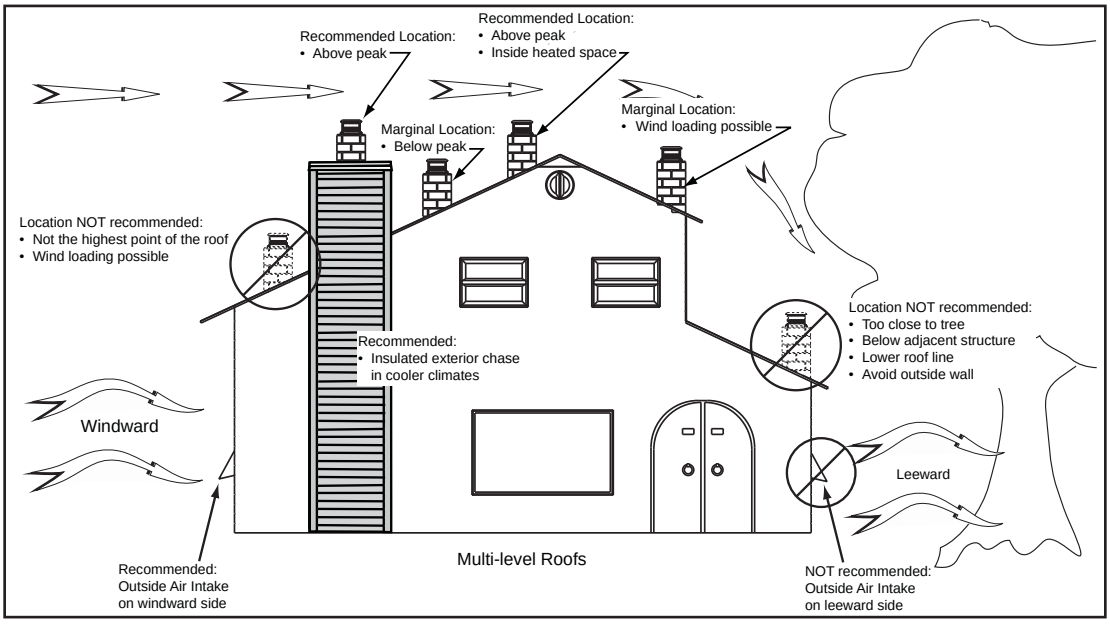


Figure 4.1

B. Thermostat Wall Control Location

The thermostat wall control's location will have some affect on the appliance's operation.

- Maximum wire length from appliance is 100 feet (30.48m) continuous unspliced wire. Recommended 20 gauge wire, solid copper .
- When located close to the appliance, it may require a slightly higher temperature setting to keep the rest of the house comfortable.
- When located in an adjacent room or on a different floor level, you will notice higher temperatures near the appliance.

CAUTION

The wall control is an integral part of the appliance. No other wall control or thermostat can be substituted.

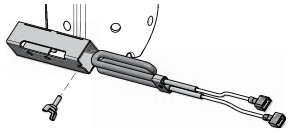
C. Tools And Supplies Needed

Tools and building supplies normally required for installation, unless installing into an existing masonry fireplace:

Reciprocating Saw	Channel Locks
Hammer	Phillips Screwdriver
Tape Measure	Plumb Line
1/4" Self-Tapping Screws	Framing Material
Hi-temp Caulking Material	Gloves
Safety Glasses	Framing Square
Electric Drill & Bits (1/4")	Level
May also need:	
Vent Support Straps	Venting Paint

D. Inspect Appliance and Components

- Open the appliance and remove all the parts and articles packed inside the Component Pack. Inspect all the parts and glass for shipping damage.
- Report to your dealer any parts damaged in shipment.
- All labels have been removed from the glass door.
- Plated surfaces have been wiped clean with a soft cloth, if applicable.
- **Read all the instructions before starting the installation. Follow these instructions carefully during the installation to ensure maximum safety and benefit.**
- **Follow pipe manufacturer instructions for installation and air clearance requirements.**



300 Watt Igniters come installed in brand new Mt. Vernon AE units and are for pellet fuel only. The 380 Watt Igniter is required for burning multi-grain fuels and is included in the component pack. Multi-fuels include, corn, sunflower seeds, and wheat.

⚠ WARNING

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⚠ WARNING

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- Installation & use of any damaged appliance.
- Modification of the appliance.
- Installation other than as instructed by Hearth & Home Technologies.
- Installation and/or use of any component part not approved by Hearth & Home Technologies.
- Operating appliance without fully assembling all components.
- Operating appliance without legs attached (if supplied with unit).
- Do NOT Overfire

Or any such action that may cause a fire hazard.

E. Install Checklist

ATTENTION INSTALLER:

Follow this Standard Work Checklist

This standard work checklist is to be used by the installer in conjunction with, not instead of, the instructions contained in this installation manual.

Customer: _____

Date Installed: _____

Lot/Address: _____

Location of Fireplace: _____

Installer: _____

Dealer/ Distributor Phone #: _____

Serial #: _____

Model (circle one): MTVERNON-AE-CSB MTVERNON-AE-MBK MTVERNON-AE-PBK MTVERNON-AE-PDB MTVERNON-AE-PFT MTVERNON-AE-PMH

WARNING! Risk of Fire or Explosion! *Failure to install fireplace according to these instructions can lead to a fire or explosion.*

Appliance Install	**YES**	**IF NO, WHY?**
Verified clearances to combustibles. (Pg. 8)	☐	_____
Fireplace is leveled and liner is secured to appliance. (Pg. 18)	☐	_____
Hearth extension size/height decided. (Pg. 22)	☐	_____
Outside air kit installed. (Pg. 15)	☐	_____
Floor protection requirements have been met.	☐	_____
The masonry chimney is inspected by a professional and is clean or the factory built metal chimney is installed according to the manufacturer's instructions and clearances.	☐	_____

Chimney Section 4 (Pg. 10)		
Chimney configuration complies with diagrams.	☐	_____
Chimney installed, locked and secured in place with proper clearance.	☐	_____
Chimney meets the minimum height requirements.	☐	_____
Roof flashing installed and sealed.	☐	_____
Terminations installed and sealed.	☐	_____

Clearances Section 3 (Pg. 7)		
Combustible materials not installed in non-combustible areas.	☐	_____
Verified all clearances meet installation manual requirements.	☐	_____
Mantels and wall projections comply with installation manual requirements.	☐	_____
Protective hearth strips and hearth extension installed per manual requirements.	☐	_____

Appliance Setup Section 5 (Pg. 15)		
All packaging and protective materials removed.	☐	_____
Firebrick, baffle and ceramic blanket installed correctly.	☐	_____
All labels have been removed from the door.	☐	_____
All packaging materials are removed from inside/under the fireplace.	☐	_____
Manual bag and all of its contents are removed from inside/under the fireplace and given to the party responsible for use and operation.	☐	_____

Hearth & Home Technologies recommends the following:

- Photographing the installation and copying this checklist for your file.
- That this checklist remain visible at all times on the fireplace until the installation is complete.

Comments: Further description of the issues, who is responsible (Installer/Builder/Other Trades, etc.) and corrective action needed:

Comments communicated to party responsible _____ by _____ on _____

(Builder/Gen. Contractor) (Installer) (Date)

Part # 4017-254 • Rev B • 01/29/13

3 Dimensions and Clearances

A. Appliance Dimensions

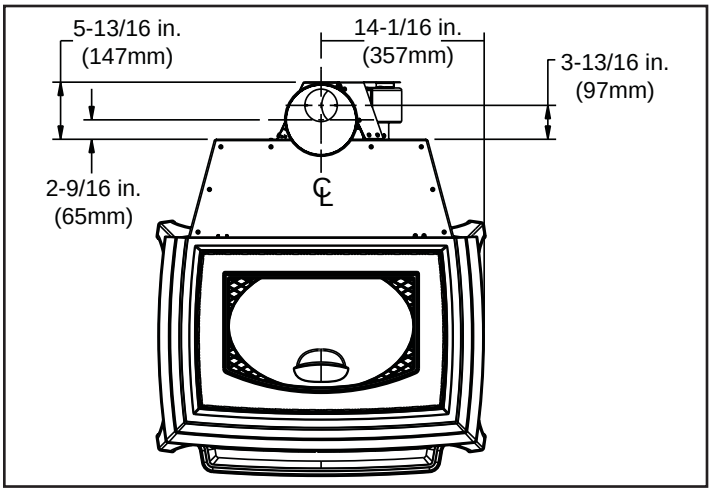


Figure 7.1 - Top View with Top Vent Adapter and 3 to 6 in (76-152mm) Adapter

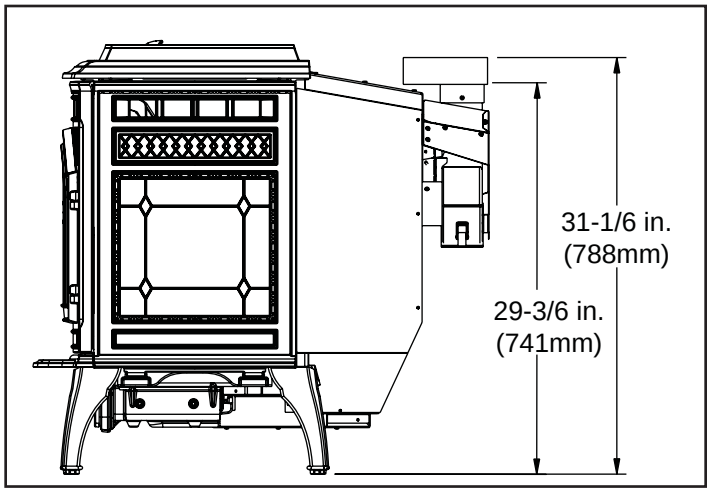


Figure 7.2 - Side View with Top Vent Adapter and 3 to 6 in (76-152mm) Offset Adapter.

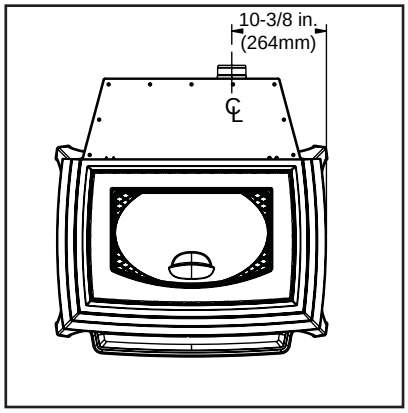


Figure 7.3 - Top View

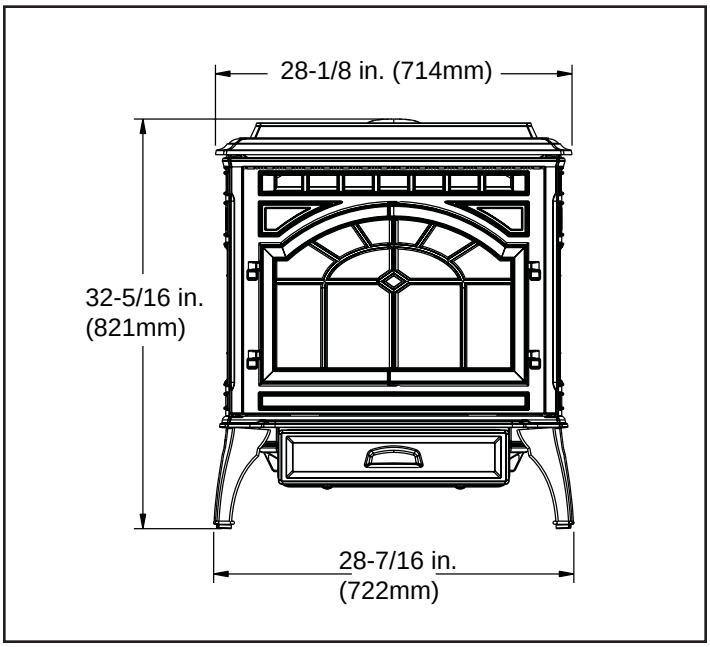


Figure 7.4 - Front View

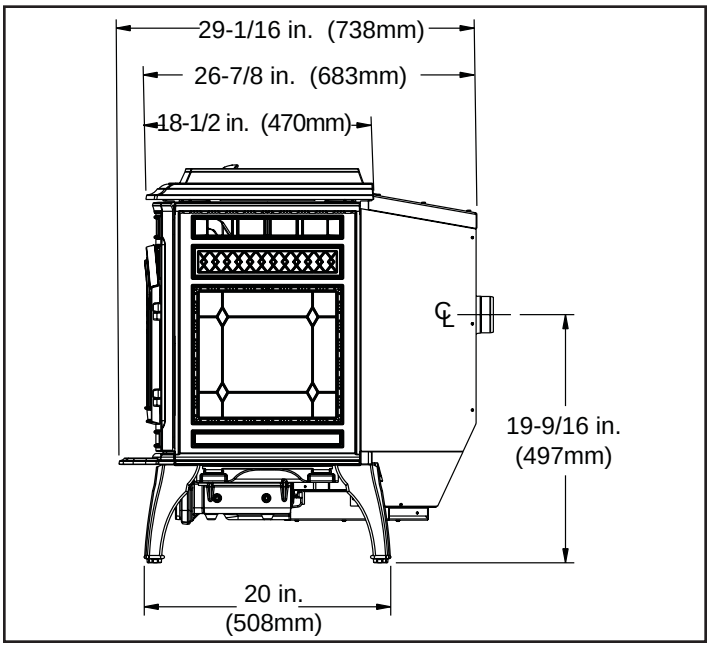
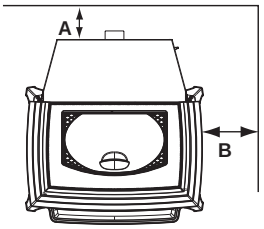
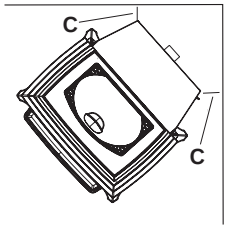


Figure 7.5 - Side View

B. Clearances to Combustibles (UL and ULC)

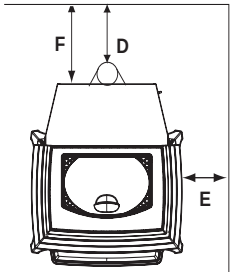


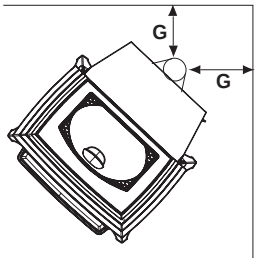


Straight Back Against Wall		Inches	Millimeters
A	Back Wall to Appliance	2	51
B	Side Wall to Appliance	6	152

Corner Installation		Inches	Millimeters
C	Walls to Appliance	2	51

Installations with:
3 to 3 inch Top Vent Adapter and
3 to 6 inch Offset Adapter Kit





Vertical Installation		Inches	Millimeters
D	Back Wall to Flue Pipe	3	76
E	Side Wall to Appliance	6	152
F	Back Wall to Appliance	8	203

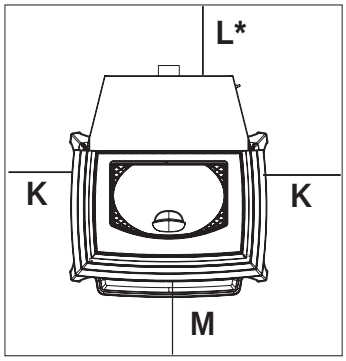
Corner Installation		Inches	Millimeters
G	Side Wall to Flue Pipe	3	76

Alcove Installation	Inches	Millimeters
Minimum Alcove Height	43	1092
Minimum Alcove Side Wall	6	152
Minimum Alcove Width	40	1016
Maximum Alcove Depth	36	914

NOTE:
- Illustrations reflect typical installations and are FOR DESIGN PURPOSES ONLY.
- Illustrations/diagrams are not drawn to scale.
- Actual installation may vary due to individual design preference.

C. Hearth Pad Requirements (UL and ULC)

Use a non-combustible floor protector, extending beneath appliance and to the front, sides and rear as indicated. Measure front distance “M” from the surface of the glass door.

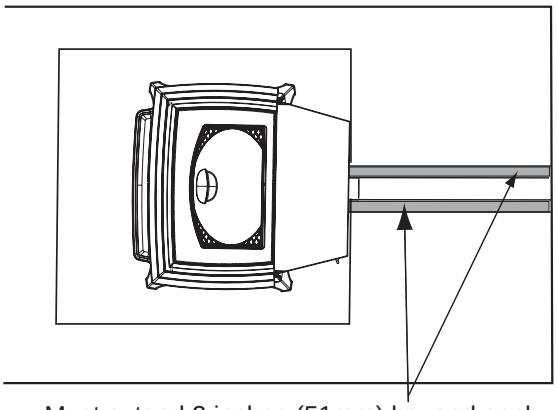


Hearth Pad Requirements		Inches	Millimeters
K	Sides	2	51
L*	Back	2	51
M	Front	6	152

***L Exception for Horizontal Installations:**

USA INSTALLATIONS: A non-combustible floor protection is recommended extending beneath the flue pipe when installed with horizontal venting or under the Top Vent Adapter with vertical installation.

CANADA INSTALLATIONS: A non-combustible floor protection extending beneath the flue pipe is **required** with horizontal venting or under the Top Vent Adapter with vertical installation.



Must extend 2 inches (51mm) beyond each side of pipe (shaded area)

⚠ WARNING

Fire Risk.

Comply with all minimum clearances to combustibles as specified.

Failure to comply may cause house fire.

4 Vent Information

A. Venting Termination Minimum Requirements

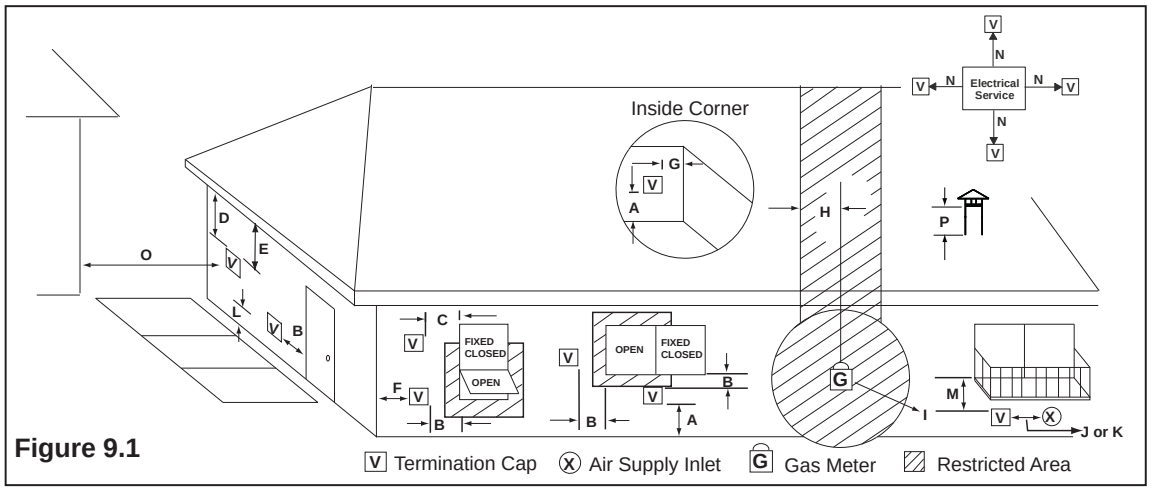


Figure 9.1

All minimum clearances are listed with an Outside Air Kit (OAK) installed, unless otherwise noted in table below.

A	12 in.	Above Finish Grade (the grade surface must be a non-combustible material
B	12 in. 48 in. no OAK	Open door or window: below or to the side
B	12 in.	Open door or window: above
C	6 in.	Permanently closed window: above, below or to the side
D	18 in. 36 in. no OAK	Vertical clearance to a ventilated soffit located above the terminal within a horizontal distance of 2 ft from the center-line of the terminal
E	12 in.	Clearance to unventilated soffit
F	12 in.	Clearance to outside corner
G	12 in.	Clearance to inside corner
H	36 in.	Above gas meter/regulator measured from horizontal center-line of regulator
I	36 in. USA 72 in. Canada	Clearance to service regulator vent outlet
J	12 in. 48 in. no OAK	Clearance to non-mechanical air supply inlet to the building or the combustions air inlet to any other appliance
K	10 ft horizontal 3 ft vertical	Clearance to mechanical air supply
L	7 ft.	Above paved sidewalk, paved driveway located on **public** property
M	12 in.	Under an open veranda, porch, deck or balcony
N	See Note below*	Electric service: above, below or to the side (location must not obstruct or interfere with access)
O	24 in.	Adjacent building, fences and protruding parts of the structure
P	12 in.	Clearance above roof line for vertical terminations

***NOTE:** Consult local building, fire officials or authorities having jurisdiction. Local codes or regulations may require different clearances.

24 in.	Above grass, top of plants, wood or any other combustible
12 in. 36 in. no OAK	Clearance from any forced air intake of other appliance
12 in.	Clearance horizontally from combustible wall
15 in.	Vented directly through a wall, minimum length of horizontal pipe
6 in. horizontal 12 in. vertical	Minimum horizontal or vertical terminations must protrude from wall

NOTICE:

Do NOT Terminate Vent:

- In any location that will allow flue gases or soot from entering or staining the building
- In any location which could create a nuisance or hazard
- In any enclosed or semi-enclosed area such as a carport, garage, attic, crawl space, under a sun deck or porch, narrow walkway
- Closely fenced area, or any location that can build up a concentration of fumes such as a stairwell, covered breezeway, etc.

NOTICE:

Termination must exhaust above air inlet elevation.

- It is recommended that at least 60 inches (1.52m) of vertical pipe be installed when appliance is vented directly through a wall. This will create a natural draft, which will help prevent the possibility of smoke or odor venting into the home during a power outage.
- It will also keep exhaust from causing a nuisance or hazard by exposing people or shrubs to high temperatures.
- The safest and preferred venting method is to extend the vent vertically through the roof or above the roof.

B. Avoiding Smoke and Odors

Negative Pressure, Shut-Down and Electrical Power Failure

To reduce the probability of back-drafting or burn-back in the pellet appliance during power failure or shut down conditions, it must be able to draft naturally without exhaust blower operation.

Negative pressure in the house will resist this natural draft if not accounted for in the pellet appliance installation.

Heat rises in the house and leaks out at upper levels. This air must be replaced with cold air from outdoors which flows into lower levels of the house.

Vents and chimneys into basements and lower levels of the house can become the conduit for air supply and reverse under these conditions.

Outside Air

An outside air kit is recommended in all installations. The Outside Air Kit must be ordered separately.

Per national building codes, consideration must be given to combustion air supply to all combustion appliances. Failure to supply adequate combustion air for all appliance demands may lead to backdrafting of those and other appliances.

When the appliance is roof vented (strongly recommended):

The air intake is best located on the exterior wall oriented towards the prevailing wind direction during the heating season.

When the appliance is side-wall vented:

The air intake is best located on the same exterior wall as the exhaust vent outlet and located lower on the wall than the exhaust vent outlet.

The outside air supply kit can supply most of the demands of the pellet appliance, but consideration must be given to the total house demand.

House demand may consume the air needed for the appliance. It may be necessary to add additional ventilation to the space in which the pellet appliance is located.

Consult with your local HVAC professional to determine the ventilation demands for your house.

Vent Configurations

To reduce probability of reverse drafting during shut-down conditions Hearth & Home Technologies strongly recommends:

- Installing the pellet vent with a minimum vertical run of 5 feet (1.52m). Preferably terminating above the roof line.
- Installing the outside air kit at least 4 feet (1.22m) below the vent termination.

To prevent soot damage to exterior walls of the house and to prevent re-entry of soot or ash into the house:

- Maintain specified clearances to windows, doors and air inlets, including air conditioners.
- Vents should not be placed below ventilated soffits. Run the vent above the roof.
- Avoid venting into alcove locations.
- Vents should not terminate under overhangs, decks or onto covered porches.
- Maintain minimum clearance of 12 inches (305mm) from the vent termination to the exterior wall. If you see deposits developing on the wall, you may need to extend this distance to accommodate your installation conditions.

⚠ CAUTION

- DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVICING ANOTHER APPLIANCE.
- DO NOT CONNECT TO ANY AIR DISTRIBUTION DUCT OR SYSTEM.

Optional Battery Back-Up

Hearth & Home Technologies supplies an optional battery back-up system that operates the appliance during power failure conditions to prevent smoking. In shutdown mode, the battery back-up will not prevent smoking.

Hearth & Home Technologies assumes no responsibility for, nor does the warranty extend to, smoke damage caused by reverse drafting of pellet appliances under shut down or power failure conditions.

C. Negative Pressure

Negative pressure results from the imbalance of air available for the appliance to operate properly. It can be strongest in lower levels of the house.

Causes include:

- Exhaust fans (kitchen, bath, etc.)
- Range hoods
- Combustion air requirements for furnaces, water heaters and other combustion appliances
- Clothes dryers
- Location of return-air vents to furnace or air conditioning
- Imbalances of the HVAC air handling system
- Upper level air leaks such as:
  - Recessed lighting
  - Attic hatch
  - Duct leaks

To minimize the effects of negative air pressure:

- Install the outside air kit with the intake facing prevailing winds during the heating season
- Ensure adequate outdoor air for all combustion appliances and exhaust equipment
- Ensure furnace and air conditioning return vents are not located in the immediate vicinity of the appliance
- Avoid installing the appliance near doors, walkways or small isolated spaces
- Recessed lighting should be a “sealed can” design
- Attic hatches weather stripped or sealed
- Attic mounted duct work and air handler joints and seams taped or sealed

⚠ WARNING

Risk of Asphyxiation!

Negative pressure can cause spillage of combustion fumes and soot.

D. Draft

Draft is the pressure difference needed to vent an appliance successfully. When an appliance is drafting successfully, all combustion byproducts are exiting the home through the chimney.

Install through the warm airspace enclosed by the building envelope. This helps to produce more draft, especially during lighting and die-down of the fire.

Considerations for successful draft include:

- Preventing negative pressure
- Location of appliance and chimney

NOTICE

HEARTH & Home Technologies assumes no responsibility for the improper performance of the chimney system caused by:

- Inadequate draft due to environmental conditions
- Downdrafts
- Tight sealing construction of the structure
- Mechanical exhausting devices

E. Chimney and Exhaust Connection

1. **Chimney & Connector**: Use 3 or 4 inch (76-102mm) diameter type “L” or “PL” venting system. It can be vented vertically or horizontally.
2. **Mobile Home:** Approved for all Listed pellet vent. If using the 3 inch (76mm) vertical Top Vent Adapter Kit or the 3 to 6 inch (76-152mm) Top Vent Offset Adapter, use Listed double wall flue connector. A Quadra-Fire Outside Air Kit must be used with manufactured home installations.
3. **Residential:** The 3 inch (76mm) vertical Top Vent Adapter Kit and the 3 to 6 inch (76-152mm) Top Vent Offset Adapter are tested to use 24 gauge single wall flue connector or Listed double wall flue connector to Class A Listed metal chimneys, or masonry chimneys meeting International Residential Code standards for solid fuel appliances.
4. **INSTALL VENT AT CLEARANCES SPECIFIED BY THE VENT MANUFACTURER.**
5. Secure exhaust venting system to the appliance with at least 3 screws. Also secure all connector pipe joints with at least 3 screws through each joint.
6. DO NOT INSTALL A FLUE DAMPER IN THE EXHAUST VENTING SYSTEM OF THIS UNIT.
7. DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE.

NOTE: All pipe must be welded seam pipe whenever possible. Seal pipe joints with high temperature silicone (500°F [260°C] minimum rated only).

NOTE: If burning shelled field corn, you must use approved venting specifically designed for corn. Follow the instructions from the venting manufacturer.

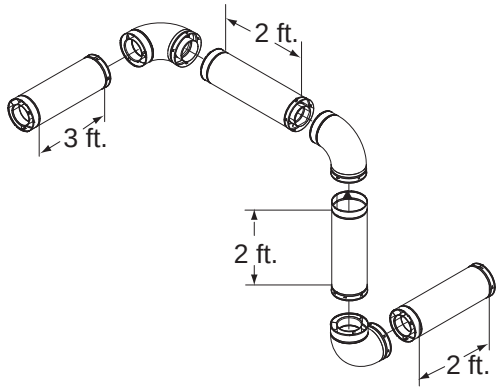
F. Equivalent Feet of Pipe

The table below can help you calculate the equivalent feet of pipe which is a method used to determine pellet vent size. **Figure 12.1**

⚠ WARNING

Vent surfaces get HOT, can cause burns if touched. Non-combustible shielding or guards may be required.

Example of 3 Elbow-Rear Vent Termination Calculation



Pellet Venting Component	# of Elbows	Feet of Pipe	Multiplied By	Equivalent Feet	Components Equivalent Feet
90° Elbow or Tee	3		X	**5**	15
45° Elbow			X	**3**	
Horizontal Pipe		7	X	**1**	7
Vertical Pipe		2	X	**0.5**	1
			Total Equivalent Feet		**23**

Note: This is a generic example and is not intended to represent any specific fuel type.

Figure 12.1

G. Pipe Selection Chart

The chart will help you in determining proper venting size according to the equivalent feet of pipe calculated previously and the altitude above sea level of this installation. **Figure 12.2**

a. Locate the calculated equivalent feet of pipe on the vertical left side of the chart.

b. Move to the right horizontally on the chart until you reach your altitude above sea level.

c. If you fall below the diagonal line, 3 or 4 inch (76 to 102mm) pipe may be used.

d. If it is anywhere above the diagonal line, a 4 inch (102mm) diameter pipe is required.

NOTICE:

- A 90° elbow is 5 times as restrictive to the flow of exhaust gases under positive pressure as 1 foot (305mm) of horizontal pipe.
- A foot of horizontal pipe is twice as restrictive as a foot of vertical pipe.

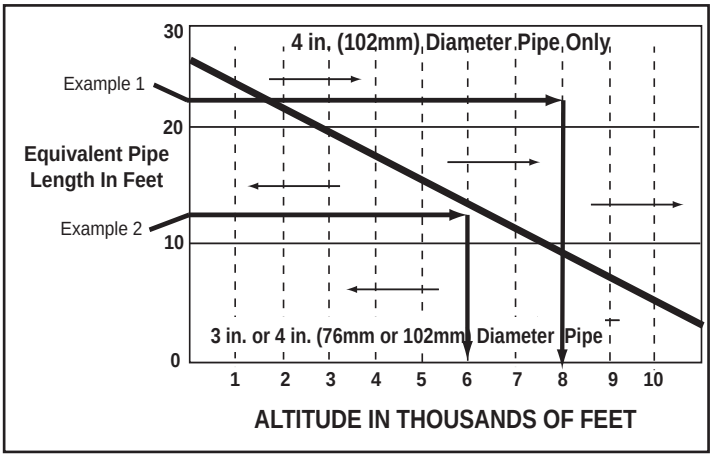


Figure 12.2

Example 1: If the equivalent length of pipe is 23 feet (7m) with altitude of 8,000 feet (2438m) you must use 4 inch (102mm) diameter type “L” or “PL” vent.

Example 2: If the equivalent length of pipe is 12 feet (3.7m) with altitude of 6,000 feet (1829m) you may use 3 or 4 inch (76 to 102mm) diameter type “L” or “PL” vent.

⚠ WARNING

Fire Risk.

- Only LISTED venting components may be used.
- NO OTHER vent components may be used.
- Substitute or damaged vent components may impair safe operation.

⚠ WARNING

RISK OF INJURY OR PROPERTY DAMAGE!

- Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage.
- Refer to the owner’s information manual provided with this appliance.
- For assistance or additional information consult a qualified installer, service agency or your dealer.

5 Venting Systems

A. Alcove

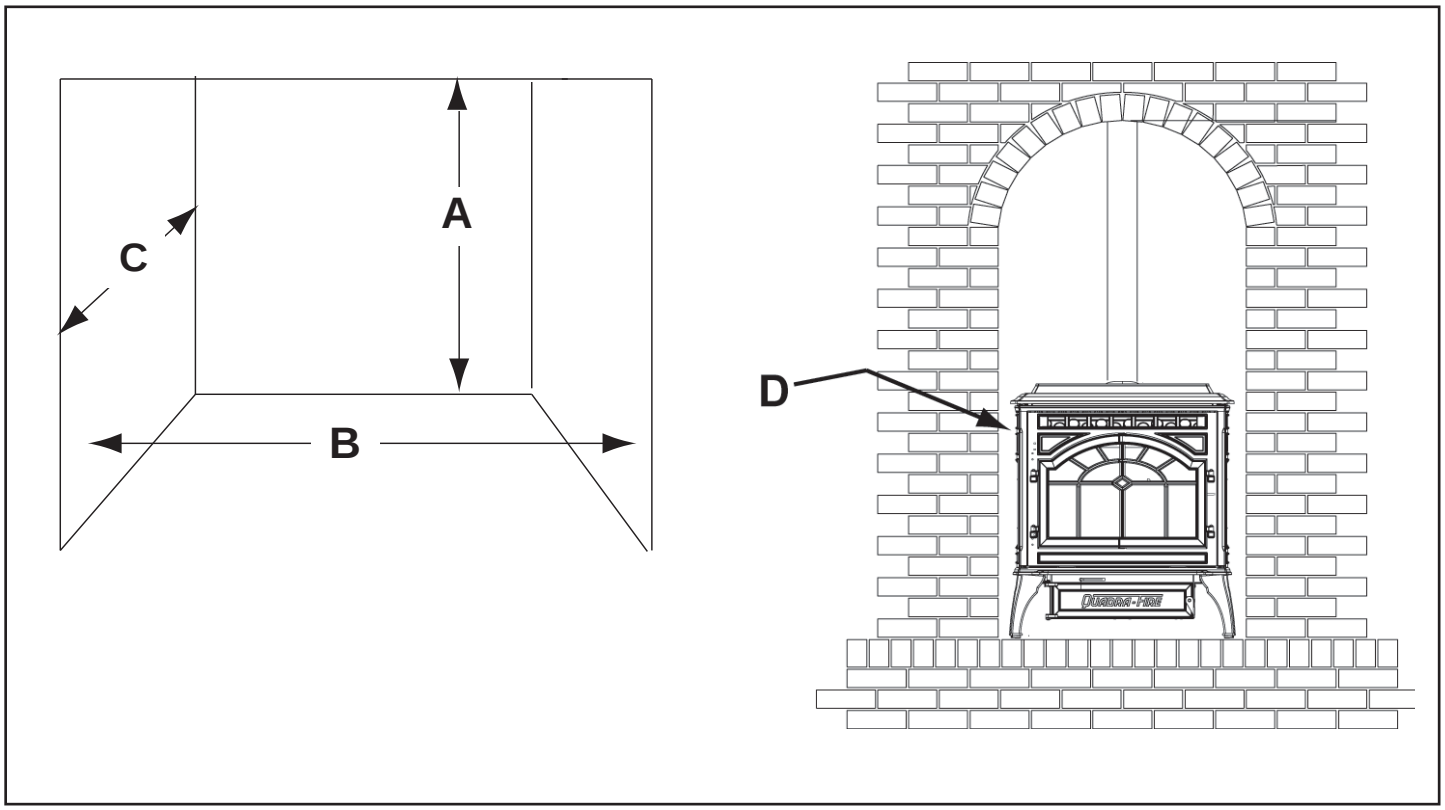


Figure 13.1

		Minimum*		Maximum	
		Inches	*Millimeters*	*Inches*	*Millimeters*
A	Height	43	1092	n/a	n/a
B	Width	40	1016	n/a	n/a
C	Depth	n/a	n/a	36	914
D	To Side Wall	6	152	n/a	n/a

*All minimums listed are to a combustible surface.

NOTE:
- Illustrations reflect typical installations and are FOR DESIGN PURPOSES ONLY.
- Illustrations/diagrams are not drawn to scale.
- Actual installation may vary due to individual design preference.

B. Through The Wall

Horizontal termination cap must be a minimum of 6 inches. (152mm) from the wall. Approved for mobile home installations. Must use 3 or 4 inch (76-102mm) “L” or “PL” Listed pellet venting or Listed double wall pipe and a Quadra-Fire Outside Air Kit in mobile homes.

NOTE:
In Canada, where passage through a wall or partition of combustible construction is desired, the installation shall conform to CAN/CSA-B365

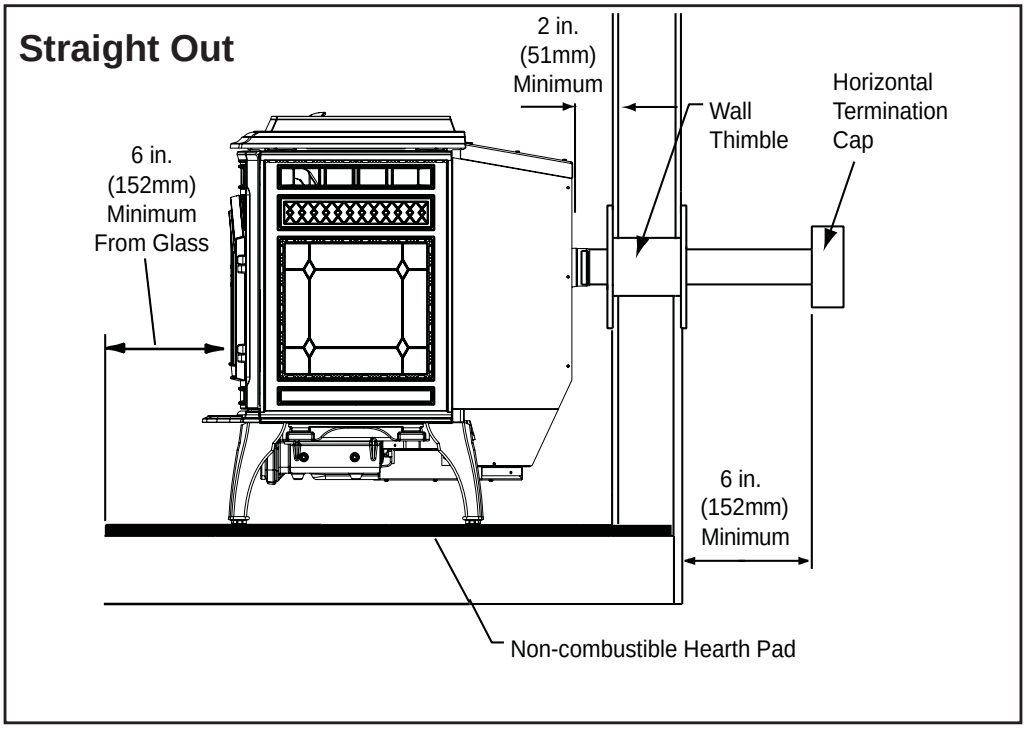


Figure 14.1

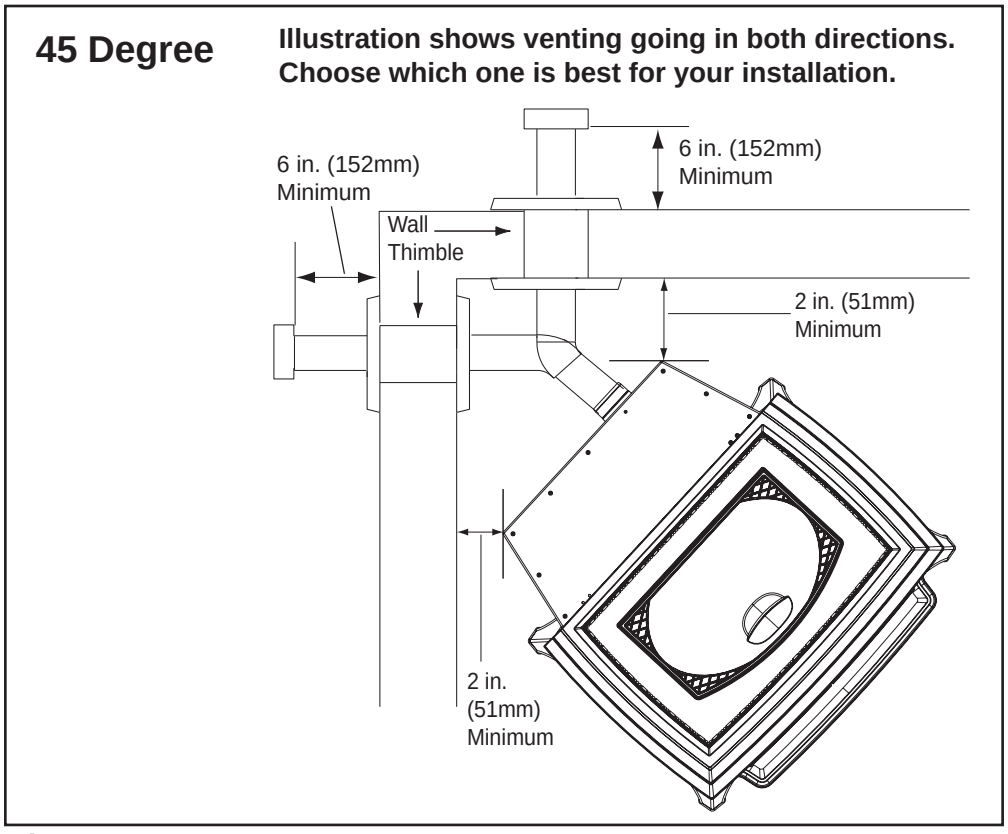


Figure 14.2

C. Vertical into Existing Class A Chimney

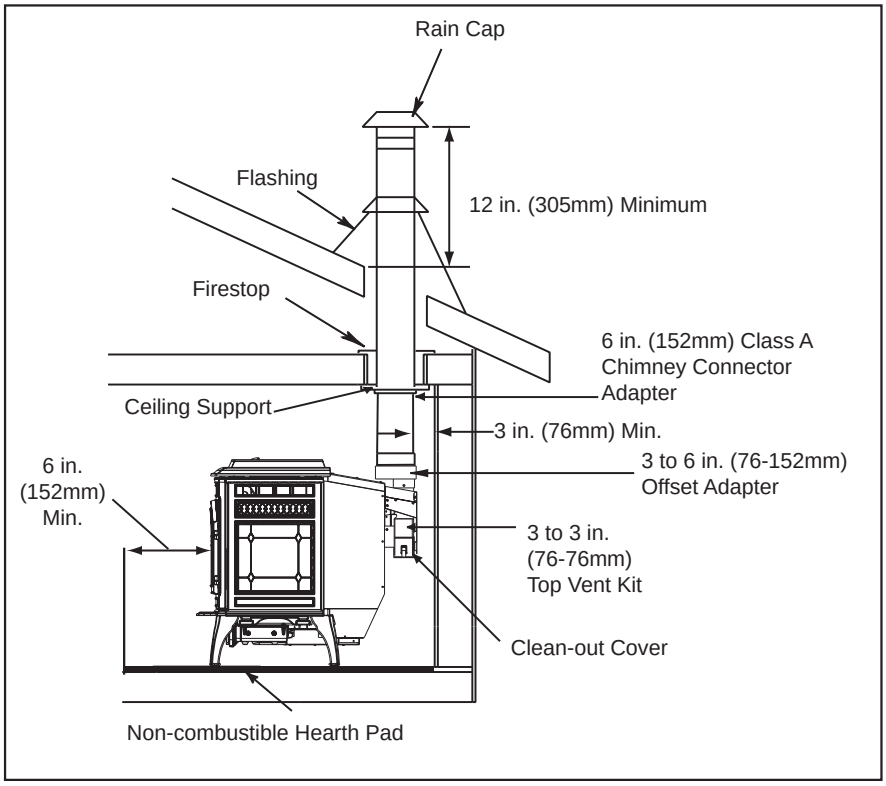


Figure 15.1

We recommend a minimum of 60 inches (1524mm) vertical, however above the eave is preferred.

All three installations are approved for mobile home installations. Must use 3 or 4 inch (76 to 102mm) "L" or "PL" Listed pellet venting or Listed double wall pipe and Quadra-Fire Outside Air Kit in mobile homes. Single wall pipe is approved for residential installations only.

*NOTE: Clearance to combustibles are for standard pellet pipe. If pellet pipe manufacturer allows reduced clearances to their pipe, reduced clearances are allowed.

NOTE:

A chimney connector shall not pass through an attic or roof space, closet or similar concealed space, or a floor or ceiling.

D. Through The Wall & Vertical - Exterior

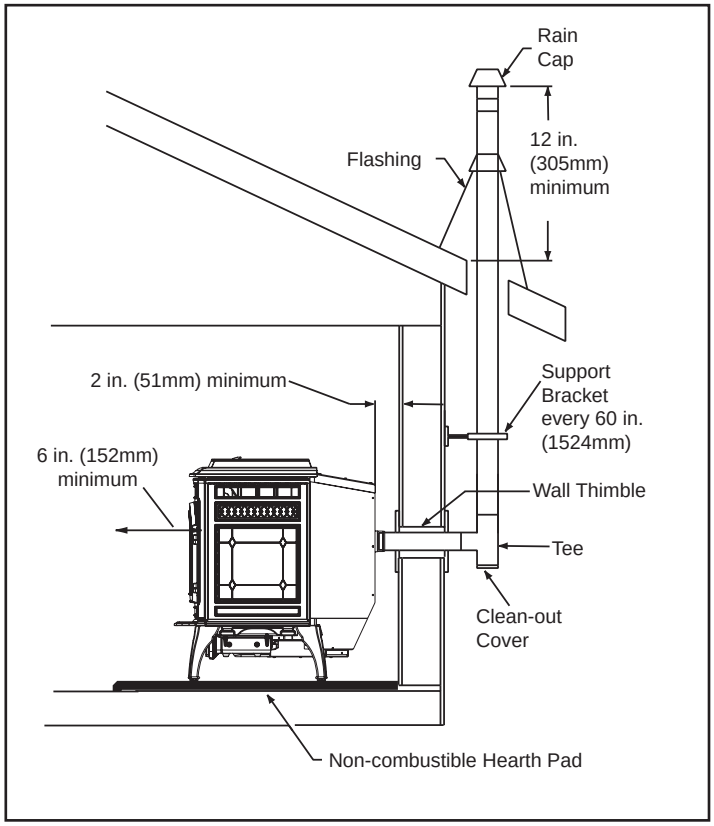


Figure 15.2

E. Vertical - Interior - Typical Installation

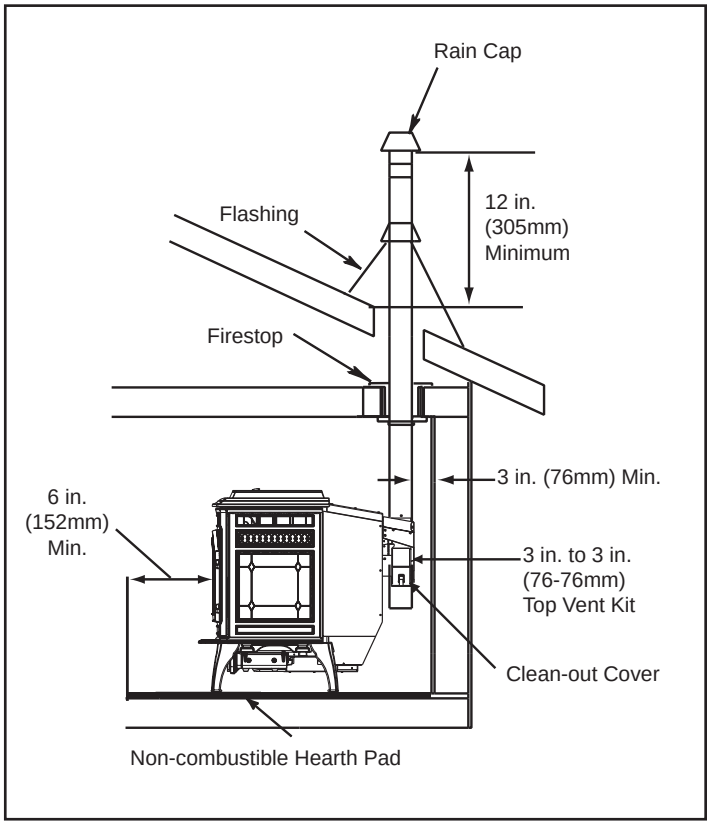


Figure 15.3

⚠ WARNING

Fire Risk.

Inspection of Chimney:

- Masonry chimney must be in good condition.
- Meets minimum standard of NFPA 211
- Factory-built chimney must be a minimum 6 inch (152mm) UL103 HT.

F. Masonry

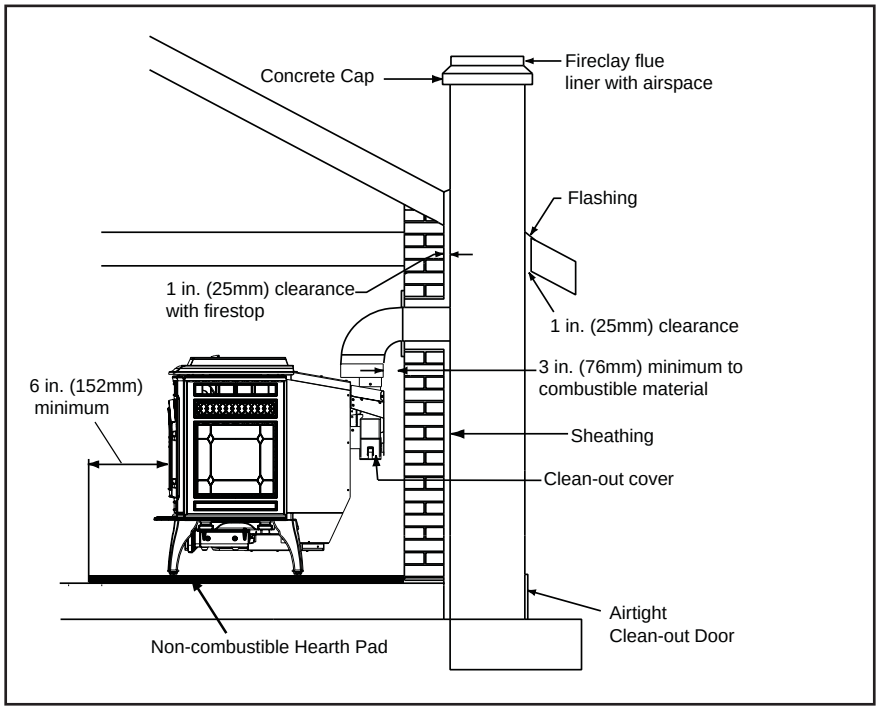


Figure 16.1

G. Alternate Masonry

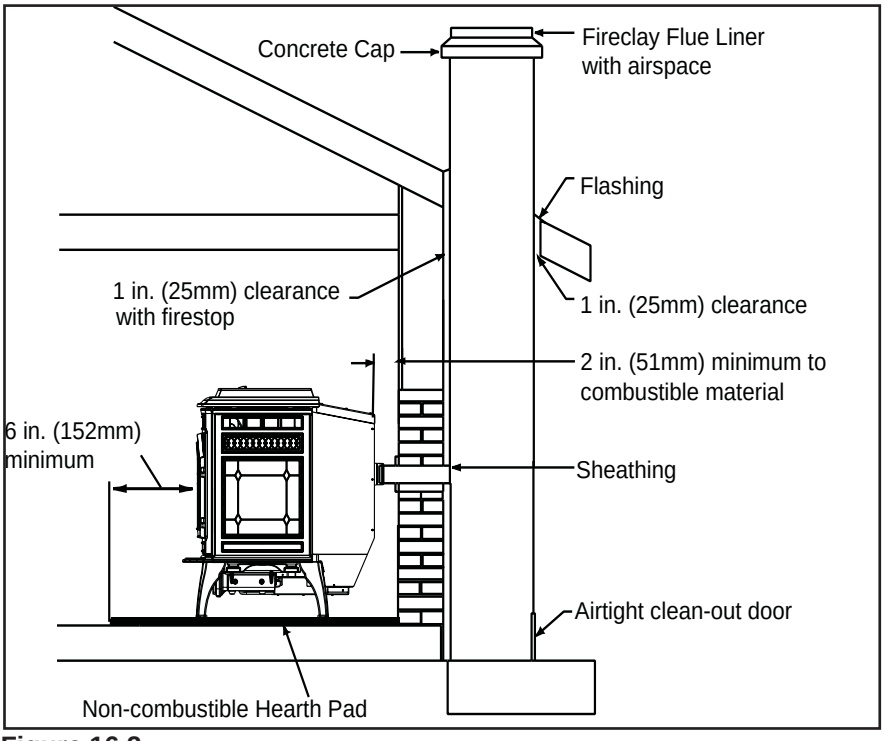


Figure 16.2

6 Appliance Set-Up

A. Leg Leveling System

1. Thread Allen bolts through nuts until flush. **Figure 17.1.** The Allen bolts and nuts are included in the component pack inside the appliance firebox.

2. Slide assembled nuts and bolts into slots on legs with the nuts on the bottom. **Figure 17.2**. Use a 5/32 in. (3.96mm) Allen wrench to adjust legs up and down to desired level. **Figure 17.3**

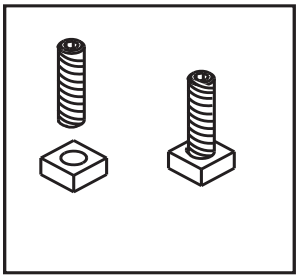


Figure 17.1

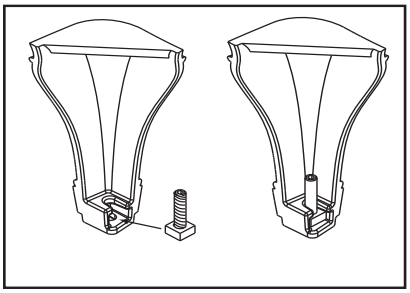


Figure 17.2

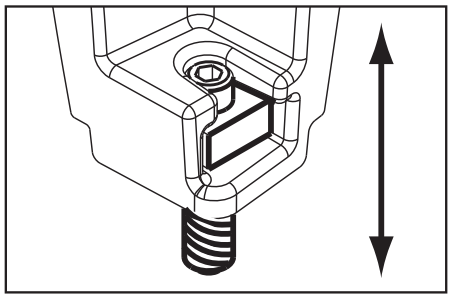


Figure 17.3 - Bolt fully extended

B. Outside Air Kit Instructions

CAUTION

Never draw outside combustion air from:
- Wall, floor or ceiling cavity
- Enclosed space such as an attic or garage

Included in Kit: 2 wire ties, 1 collar assembly, 1 termination cap assembly, 1 trim ring, fasteners.

NOTE: 3 INCH ALUMINUM FLEX PIPE NOT INCLUDED.
Tools Needed: Phillips head screw driver; wire cutters hole saw or jig saw.

1. Measure distance from floor to air vent opening in appliance and mark location on wall.

   Use saw to cut opening in wall. Cut a 3-1/2 to 4 inch (89-102mm) opening on inside wall and a 4 to 4-1/2 inch (102-114mm) opening on outside of house.
2. Use wire tie to secure flex pipe to collar assembly.
3. Slide trim ring over flex pipe and run pipe through wall.
4. Attach flex pipe (not supplied) to outside termination cap with second wire tie.
5. Secure termination cap to outside surface.
6. Secure trim ring to interior wall.

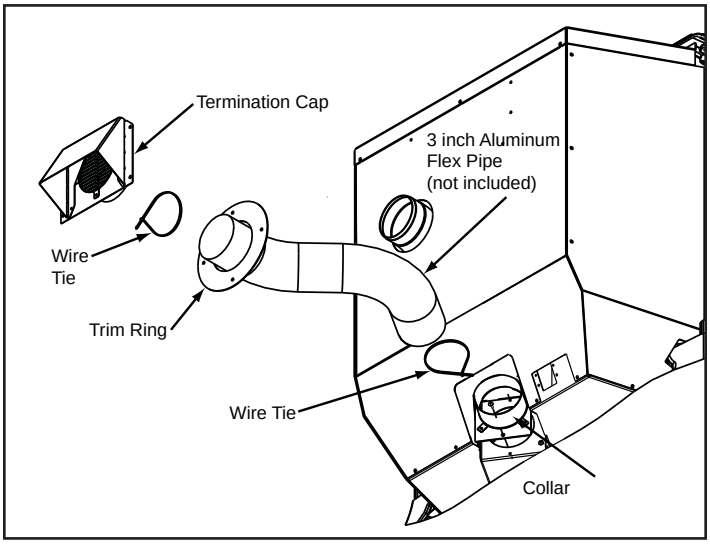


Figure 17.4

C. Top Vent Adapter Installation

3 to 3 inch (76-76mm) Top Vent Adapter
3 to 6 inch (76-152mm) Top Vent Offset Adapter

Installing the Top Vent Adapter

1. Put a layer of high temperature silicone on the 3 inch (76mm) exhaust outlet. **Do not put silicone inside of pipe. Figure 18.1**
2. Slide the top vent adapter onto the rear exhaust outlet and adjust the assembly to a vertical position until the top of the flue outlet is centered and is in a level position. **Figure 18.1**
3. Align slot on left of adapter with hole in the back of the unit and secure with screw. You may drill out the hole using #26 drill bit provided but only if needed. **Figure 18.2**
4. Install the 5 mounting screws, 3 on the left and 2 on the right.
5. Drill 2 holes with #26 drill bit through the rear exhaust outlet using the 2 holes already in the short horizontal pipe in the top vent adapter as a guide. Install the screws. **Figure 18.2**
6. Install the vent pipe into the top vent adapter (be sure to silicone all joints). To use an existing 6 inch (152mm) vent system, install the 3 to 6 in (76-152mm) offset adapter before installing vent pipe.
7. To clean top vent adapter, open clean-out cover and remove any debris build-up. **Figure 18.3 & 18.4**

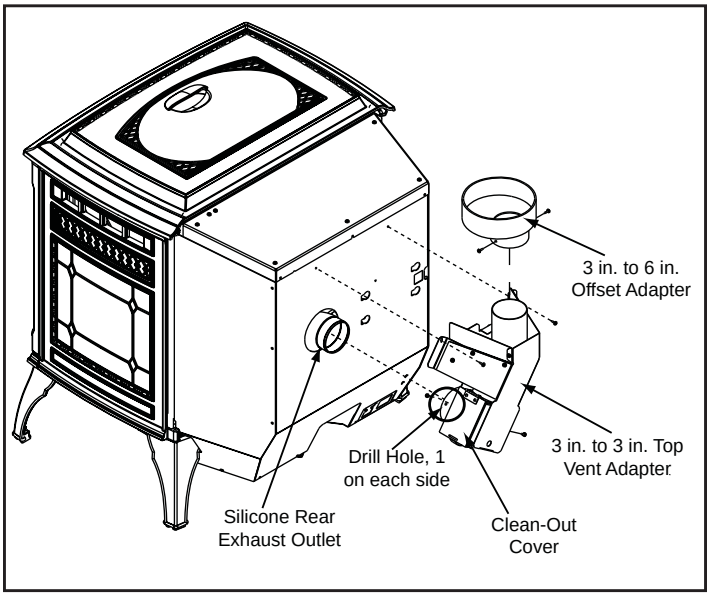


Figure 18.1

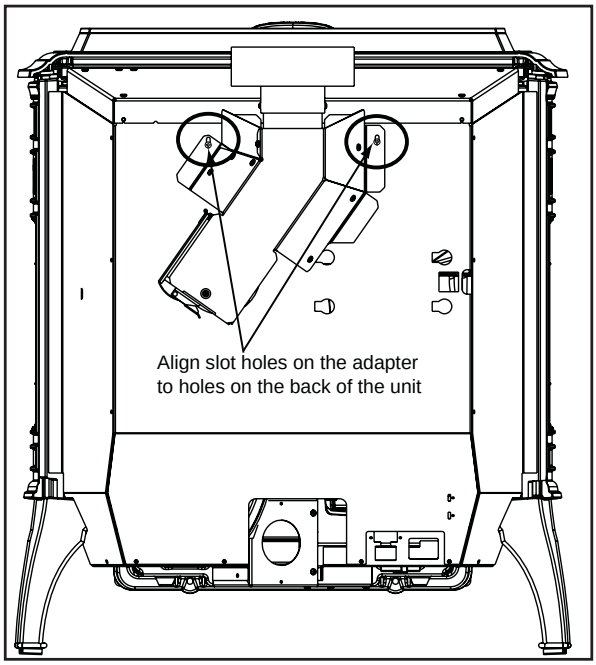


Figure 18.2

D. Rear Vent & Rear Vent to Top Vent Adapter Installation

1. Put a layer of high temperature silicone on the 3 inch (76mm) exhaust outlet. **Do not put silicone inside of pipe. Figure 18.1**
2. Slide the adapter onto the rear exhaust outlet and adjust the assembly to the appropriate position.
3. Install the vent pipe into the adapter (be sure to silicone all joints)

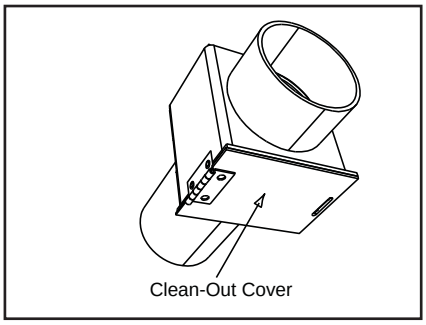


Figure 18.3 - Rear Vent Adapter

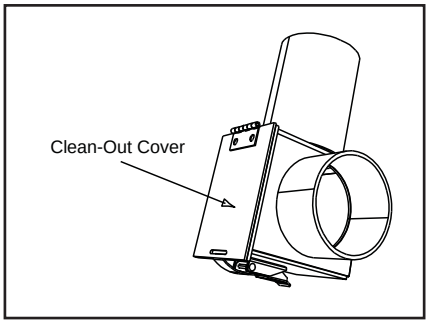


Figure 18.4 - Rear to Top Vent Adapter - 90°

E. Optional Log Set Placement Instructions

2 PIECE LOG SET INSTALLATION

1. Place the left log as shown. There are 2 indentations in the bottom of the log to fit over the screw heads in the firebox. **Figures 19.1 and 19.2**
2. Place the right log in front of the 2 screw heads in the firebox. **Figures 19.3 & 19.4**

CAUTION

Logs are FRAGILE. Use extreme care when handling or cleaning logs.

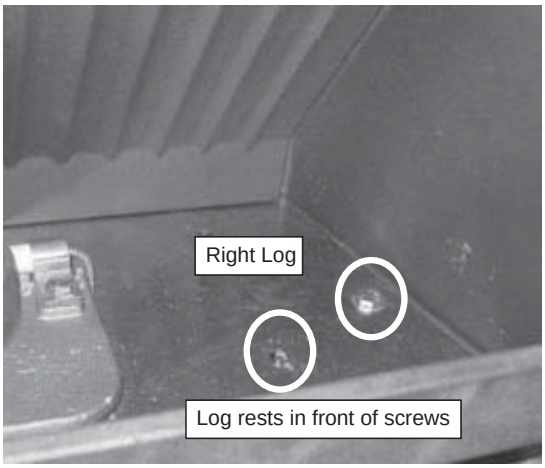


Figure 19.3

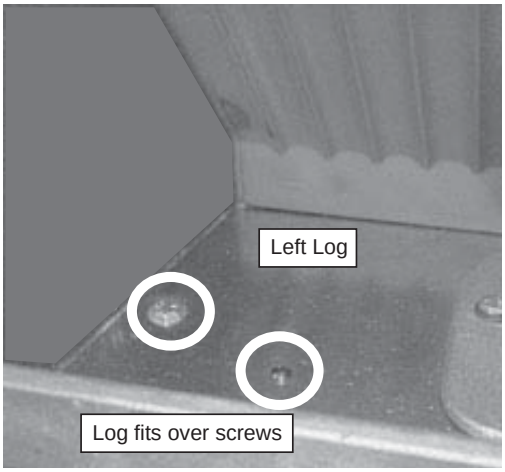


Figure 19.1

Figure 19.4

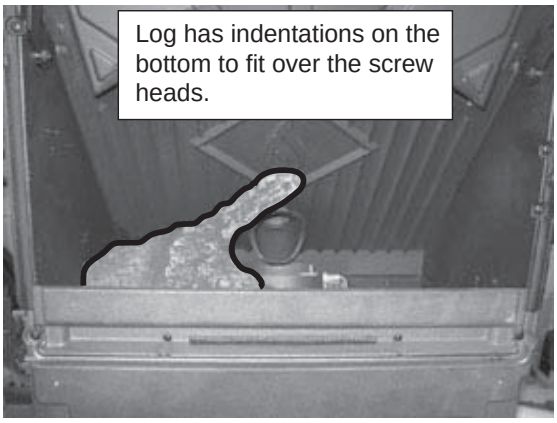


Figure 19.2

NOTICE:
Due to the abrasive nature of a pellet appliance fire, the logs are not covered under warranty. Any placement variation other than shown here can cause excessive heat and shall void the appliance warranty.

F. Wall Control Thermostat Installation

1. When mounting the wall control thermostat on the wall, be sure to follow your thermostat wall control's installation instructions carefully.

   NOTE: The wall control thermostat should be mounted on an inside wall and not in direct line with the appliance convection air.

   NOTE: If the wall control thermostat is located too close to the appliance, you may need to set the temperature setting slightly higher to maintain the desired temperature in your home.

2. There is a 5 screw terminal block located on the back lower left corner of the appliance directly above the power cord inlet.

   The center 3 screws are for the wall control thermostat wires and the 2 outer screws are mounting screw and should not have wires attached to them.

   The thermostat wires are color coded. The green wire is on the left, the white in the middle and the red on the right.

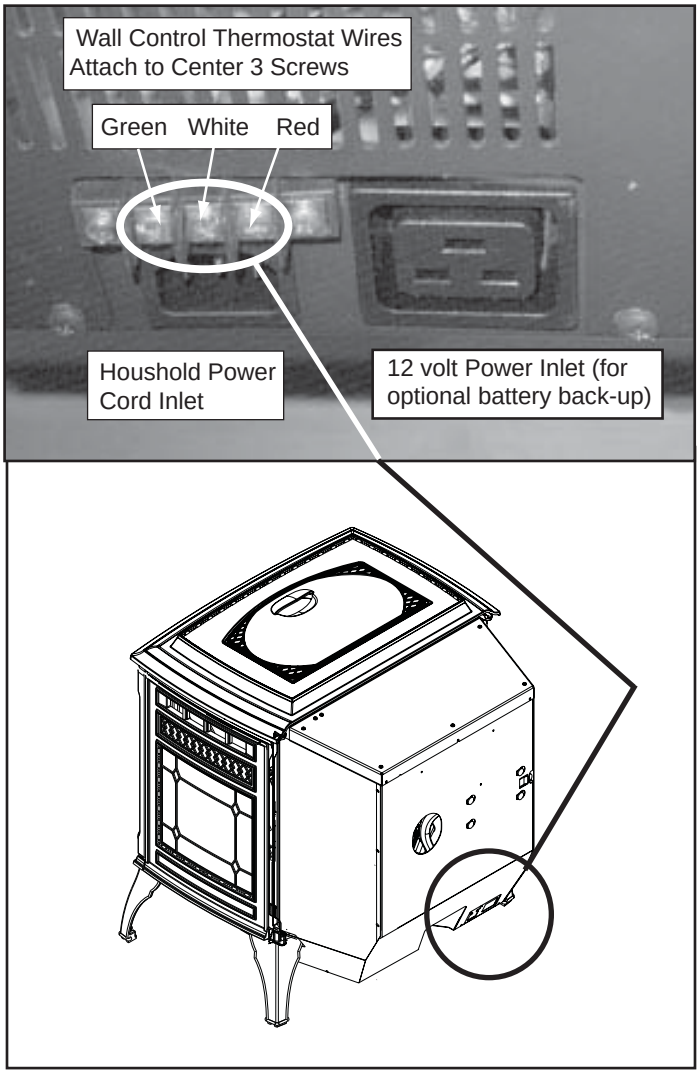

Wall Control Thermostat Wires Attach to Center 3 Screws
Green White Red
Houshold Power Cord Inlet
12 volt Power Inlet (for optional battery back-up)

Figure 20.2

⚠ CAUTION

Shock hazard.

- Do NOT remove grounding prong from plug.
- Plug directly into properly grounded 3 prong receptacle.
- Route cord away from appliance.
- Do NOT route cord under or in front of appliance.

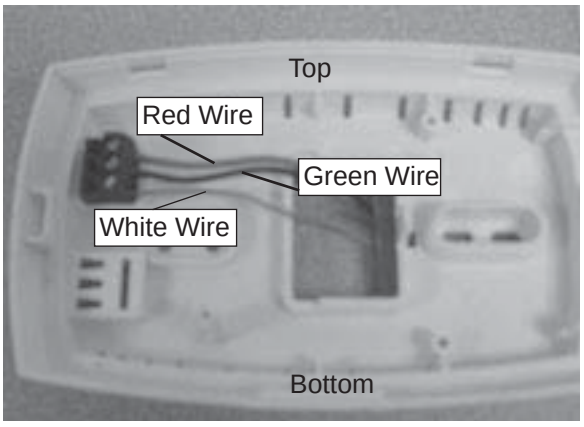


Figure 20.1 - Back Side of Wall Control with Cover Off

7 Mobile Home Installation

You must use a Quadra-Fire Outside Air Kit for installation in a mobile home.

1. An outside air inlet must be provided for the combustion air and must remain clear of leaves, debris, ice and/or snow. It must be unrestricted while the appliance is in use to prevent room air starvation which causes smoke spillage. Smoke spillage can also set off smoke alarms.
2. The combustion air duct system must be made of metal. It must permit zero clearance to combustible construction and prevent material from dropping into the inlet or into the area beneath the dwelling and contain a rodent screen.
3. The appliance must be secured to the mobile home structure by bolting it to the floor (using lag bolts). Use the same holes that secured the appliance to the shipping pallet.
4. The appliance must be grounded with #8 solid copper grounding wire or equivalent, terminated at each end with an NEC approved grounding device.
5. Refer to Clearances to Combustibles and floor protection requirements on **page 8** for listings to combustibles and appropriate chimney systems.
6. Use silicone to create an effective vapor barrier at the location where the chimney or other component penetrates to the exterior of the structure.
7. Follow the chimney manufacturer's instructions when installing the vent system for use in a mobile home.
8. Installation shall be in accordance with the Manufacturers Home & Safety Standard (HUD) CFR 3280, Part 24.

CAUTION

Never draw outside combustion air from:
- Wall, floor or ceiling cavity
- Enclosed space such as an attic or garage

WARNING

It is critical to have a working smoke detector installed in the home of unit operation.

- Smoke alarms that are properly installed and maintained play a vital role in reducing fire deaths and injuries. Having a working smoke alarm reduces the chance of fire related injuries.

⚠ WARNING

NEVER INSTALL IN A SLEEPING ROOM.

CAUTION

THE STRUCTURAL INTEGRITY OF THE MOBILE HOME FLOOR, WALL AND CEILING/ROOF MUST BE MAINTAINED

Do NOT cut through:
- Floor joist, wall, studs or ceiling trusses.
- Any supporting material that would affect the structural integrity.

This unit is to be connected to a factory-built chimney conforming to CAN/ULC-S629, Standard for 650°C Factory-Built Chimneys.

For removal of the chimney for mobile home transportation, contact the proper transportation officials.

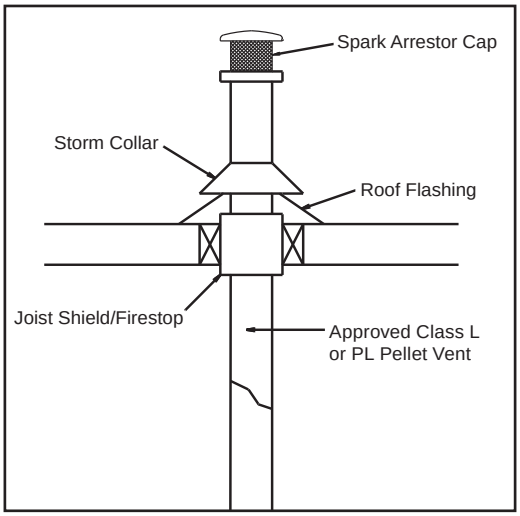


Figure 21.1

WARNING

Products of combustion generate carbon monoxide and different fuels generate different levels. Carbon monoxide
- Only use approved fuels in this appliance.
- Always keep door shut during operation. Operating this unit with doors open can allow CO to leak into the home.

CO can kill you before you are aware it is in your home. At lower levels of exposure, CO causes mild effects that are often mistaken for the flu. These symptoms include headaches, dizziness, disorientation, nausea and fatigue. The effects of CO exposure can vary greatly from person to person depending on age, overall health and the concentration and length of exposure.

8 Accessory List

ACCESSORIES				
	12 Volt Power Cord		12VCORD-AE	**Y**
	Collar, Offset, Top Vent		812-3570	
	Damper, 3 Inch - Tall Vertical Installs Only		PEL-DAMP3	**Y**
	Damper, 4 Inch - Tall Vertical Installs Only		PEL-DAMP4	
	Firescreen		SCR-7005	
	Log Set, (Sold as Set only)	2 Pc	LOGS-60-AE-B	**Y**
	Outside Air Kit		OAK-3	
	Top Vent Adapter		TPVNT-3	
	Vent Adapter, 3-4”		811-0720	
	Vent Adapter, 90, Cleanout		811-0610	
	Vent Adapter, Rear		811-0620	
	Warming Shelves	Matte Black	844-9780	
		Porcelian Black	WSLG-PBK	
		Porcelian Dark Blue	WSLG-PDB	
		Porcelian Frost	WSLG-PFT	
		Sienna Bronze	WSLG-CSB	
		Willow	WSLG-CWL	
		Mahogany	844-9810	
FASTENERS				
	Avk Rivnut Repair Kit - 1/4-20 & 3/8-16 Rivnut Tools		RIVNUT-REPAIR	**Y**
	Button Head 1/4-20 X .5	Pkg of 20	32328/20	**Y**
	Nut, Ser Flange Small 1/4-20	Pkg of 24	226-0130/24	**Y**
	Screw, 1/4-20 X 3/8 Phillips Button Head	Pkg of 24	7000-401/24	**Y**
	Screw 1/4-20 X 5/8 Phillips Pan Head	Pkg of 24	7000-398/24	**Y**
	Screw, Pan Head Philips 8-32 X 3/8	Pkg of 40	225-0500/40	**Y**
	Screw, Sheet Metal #8 X 1/2 S-Grip	Pkg of 40	12460/40	**Y**
	Wing Thumb Screw 8-32 X 1/2	Pkg of 24	7000-223/24	**Y**

QUADRA-FIRE
NOTHING BURNS LIKE A QUAD

CONTACT INFORMATION

Hearth & Home Technologies
1445 North Highway
Colville, WA 99114
Division of HNI INDUSTRIES

Please contact your Quadra-Fire dealer with any questions or concerns.
For the number of your nearest Quadra-Fire dealer
log onto www.quadrafire.com

CAUTION

DO NOT DISCARD THIS MANUAL

- Important operating and maintenance instructions included.
- Read, understand and follow these instructions for safe installation and operation.
- Leave this manual with party responsible for use and operation.

We recommend that you record the following pertinent information for your heating appliance.

Date purchased/installed: _____

Serial Number: _____ Location on appliance: _____

Dealership purchased from: _____ Dealer phone: _____

Notes: _____

_____

_____

_____

This product may be covered by one or more of the following patents: (United States) 5341794, 5263471, 6688302, 7216645, 7047962 or other U.S. and foreign patents pending.

HEARTH & HOME technologies